Minutes of Meeting COLORADO RIVER BOARD OF CALIFORNIA

Wednesday, January 10, 2018

A meeting of the Colorado River Board (Board) of California was held on Wednesday, January 10, 2018.

Committee Members and Alternates Present

Dana B. Fisher, Jr., Chairman (PVID) Glen D. Peterson (MWD)

David De Jesus (MWD Alternate)

David R. Pettijohn, Vice-Chairman

James Hanks (IID) (LADWP Alternate)

Jeanine Jones (DWR Designee)

Jack Seiler (PVID Alternate)

Hank Kuiper (Public Member)

Mark Watton (SDCWA Alternate)

Peter Nelson (CVWD) Doug Wilson (SDCWA)

Committee Members and Alternates Absent

Norma Sierra Galindo (IID Alternate)

John Powell, Jr. (CVWD Alternate)

Christopher Hayes (DFW Designee) David Vigil (DFW Alternate)

Others Present

Steve Abbott Autumn Plourd Dan Denham Angela Rashid Karen Donovan Ivory Reyburn Gail Farber Kelly Rodgers Christopher Harris Shanti Rosset Bill Hasencamp Tom Ryan Joanna Hoff Jack Seiler Ned Hyduke Tina Shields Michael Hughes Alina Tishchenko Tom Levy Kimberlyn Velasquez Kara Mathews Jerry Zimmerman

Vic Nguyen

CALL TO ORDER

Chairman Fisher announced the presence of a quorum and called the meeting to order at 10:05 a.m.

OPPORTUNITY FOR THE PUBLIC TO ADDRESS THE BOARD

Chairman Fisher invited members of the audience to address the Board on items on the agenda or matters related to the Board. Mr. Tom Levy reminded the audience that the Colorado River Authority will be hosting a tour of the Oroville Dam and spillway on January 31 and February 1, 2018.

Board member Wilson introduced Ms. Kelly Rodgers as the new Director of Colorado River Programs for the San Diego County Water Authority (SDCWA).

ADMINISTRATION

Chairman Fisher asked for a motion to approve the December 13, 2017 meeting minutes. Vice-Chairman Pettijohn moved that the minutes be approved and was seconded by Ms. Jones. Mr. Hanks asked whether he needed to abstain from voting on the minutes, as he was absent at the December Board meeting. After further discussion and clarification, Mr. Hanks withdrew his abstention, and the minutes were approved unanimously.

Executive Director Harris presented an informational item on the historical membership of the Colorado River Board of California since its inception. Staff developed a spreadsheet listing the Board members, Executive Directors and Chief Engineers of the Board and their affiliation. The statutes were amended in 1976 and 1983, which added two state agency ex-officio members from the Department of Fish and Game (now Department of Fish and Wildlife) and Department of Water Resources. Three public members were added to the Board in 1976, but this was reduced to two public members in 1983. Eventually, staff intends to post the final version of the spreadsheet on the Board's website and update it as needed.

Mr. Harris facilitated a discussion on the draft "Rules and Regulations of the Colorado River Board of California" document. Mr. Peterson described that the proposal is to have a 4-year term for the Chair and Vice-Chair concurrent with the Governor's term. No one is precluded from being re-elected any number of times, but consensus would be required. Mr. Peterson motioned and was seconded by Mr. Pettijohn. Discussion ensued regarding the advantages and disadvantages of the proposed changes in the rules and regulations, such as the length of service

of a Chairperson. A substitute motion was suggested by Mr. Wilson, seconded by Mr. Kuiper, to refer the proposed actions to a committee or Board workshop for review. A roll call vote was conducted, and the substitute motion was approved.

COLORADO RIVER BASIN WATER REPORTS

Ms. Rashid reported that as of January 8, 2018, the water level at Lake Powell was 3,622.10 feet with 13.99 million-acre feet (MAF) of storage, or 58% of capacity. The water level at Lake Mead was 1,083.19 feet with 10.28 MAF of storage, or 39% of capacity. As of January 7th, the total system storage was 31.99 MAF, or 54% of capacity, which is about 2.55 MAF more than the total system storage at this time last year.

Ms. Rashid reported that Water Year-2018 precipitation to date is 53% of normal and the current Basin snowpack is 55% of normal. The forecasted inflow into Lake Powell for WY-2018 is 6.75 MAF (62% of normal). The forecasted inflow to Lake Powell for April to July 2018 is 3.90 MAF (54% of normal). Ms. Rashid reported that the December observed inflow to Lake Powell was 0.30 MAF (82% of normal) and the January inflow forecast to Lake Powell was 0.31 MAF (86% of normal). Ms. Rashid noted that the figures are low, but it is still early in the snow accumulation season.

Ms. Rashid reported that November and December were exceptionally dry throughout the Basin, with exception of the Upper Green River Basin and the Colorado River Headwaters. Ms. Rashid reported that the Upper Basin reservoir storage excluding Lake Powell ranged from 56% of capacity at Fontenelle in Wyoming, 89% of capacity at Flaming Gorge in Wyoming and Utah, 92% of capacity at Morrow Point and 70% of capacity at Blue Mesa in Colorado, and 75% of capacity at Navajo in New Mexico.

Mr. Harris reported that the final 2018 Annual Operating Plan has been posted on Reclamation's webpages. At Lake Powell, the Upper Elevation Balancing Tier will govern with an 8.23 MAF release and a potential for an April mid-year adjustment to 9.0 MAF. The Normal or ICS Surplus Condition will govern Lake Mead operations, and 1.5 MAF will be made available to be scheduled for delivery to Mexico. Mr. Harris also noted that approval letters from the U.S. Bureau of Reclamation's (Reclamation) Lower Colorado Region with respect to the Section 5 contractors in the Lower Basin states have been received, and a copy of the approval letters for the California's contractors are included in the Board packet.

Mr. Harris stated that CRB staff created a table displaying the Lower Basin consumptive use and storage programs from 2007 to 2016 in response to Mr. Wilson's request during the December 2017 Board meeting. Mr. Wilson offered his thanks and remarked on how well California has reduced its Colorado River water use over the last 10 years.

Board member Nelson, representing the Coachella Valley Water District (CVWD), noted that the storage and conservation programs depicted on the table saved nearly twenty feet of elevation in Lake Mead. Mr. Harris added that without implementation of the conservation programs, the system could have gone into shortage in 2015. Mr. Harris stated that Reclamation will continue to track the benefits of various water storage and conservation programs on Lake Mead's elevation.

Mr. Harris reported that through January 4, 2018, Brock and Senator Wash reservoirs captured 2,634 AF and 1,704, respectively. In 2017, Brock and Senator Wash reservoirs captured 115,925 AF and 99,001 AF, respectively. Mr. Harris noted that the reservoirs were useful for managing flows below Parker Dam. He also reported that the excess deliveries to Mexico through December 31, 2017 were 16,602 AF, which is higher than the excess flows of 9,230 AF in 2016. As of December 29, 2017, the total bypassed flows to the Cienga de Santa Clara in Mexico were 98,830 AF. Mr. Harris stated that annual bypass flows historically averaged between 110,000 to 115,000 AF.

State and Local Reports

Mr. Harris reported on the ongoing drought conditions in United States, noting the dry conditions in the western United States. Ms. Jones, representing the California Department of Water Resources (CDWR), reported that December was one of the driest on record for parts of California, and DWR is waiting to observe the effects from the most recent storm. The storm occurred over two days and generally brought 2 to 3 inches in most areas throughout the state, with even more precipitation in high mountain areas. Ms. Jones stated that precipitation in the Sierra Nevada basins is much closer to average for this time of year after this storm; for example, precipitation in the Sacramento watershed is now close to 80% of average. However, the storm was warm and did not improve snowpack, which was already limited before the storm. Snowpack in the Sierra watershed region increased to 20 to 30% of average for this time of year, which is better than before the storm, but is still well below average. Ms. Jones noted that a colder storm system is anticipated for the early part of next week, but beyond that there is not much predictive capability.

Board member Peterson, representing the Metropolitan Water District of Southern California (MWD), reported that it has been a record year from MWD's perspective. MWD has put more water in storage than ever before, with 2.5 MAF of water in dry-year reserve storage programs. He reported that MWD put 350,000 AF in underground storage accounts within the CVWD and Desert Water Agency service areas. Mr. Peterson stated that all of MWD's reservoirs are full or near full. He also reported an increase in water use due to ground water replenishment and anticipated that higher water uses could continue due to dry conditions. Mr. Peterson stated that MWD also stored about 395,000 AF in its Lake Mead ICS account, but the accounting is still being finalized.

Board member Pettijohn, representing the Los Angeles Department of Water and Power (LADWP), reported that the precipitation is tracking closely to the driest water year on record in the Eastern Sierra. Chairman Fisher remarked that the current turnaround in hydrology is remarkable considering that last year was the wettest years on record. Mr. Pettijohn noted that there is still time in the season to improve precipitation.

Ms. Shields, on behalf of the Imperial Irrigation District (IID), reported that the mitigation water to the Salton Sea ended at the end of 2017. Reclamation is still in the process of verifying the numbers, but Ms. Shields stated that IID came within 800 AF of the final obligation of 105,311 AF. She reported that IID anticipates having another year of conservation of over 500,000 AF, and any excess water between 50,000 and 90,000 AF will be stored pursuant to side agreements with MWD to store water in its system. She noted that now that mitigation deliveries have ended, the transfer obligation and deliveries to SDCWA and CVWD will ramp up.

STATUS OF COLORADO RIVER BASIN PROGRAMS

Lower Basin Drought Contingency Plan

Mr. Harris reported that work on the Lower Basin Drought Contingency Plan (DCP) has continued since representatives from the Lower and Upper Basins last met in December. He stated that a follow-up coordination call was scheduled for the afternoon of January 10th with a small group of Lower and Upper Basin representatives to discuss the status of the key terms sheet. The Upper Basin small group reviewed the Lower Basin DCP and provided comments for review. On January 11th, the Lower Basin small group and legal staff will meet in Ontario to continue to refine and finalize the Lower Basin DCP key term sheet and review the feedback from the Upper Basin. A larger group of Basin States legal and technical representatives will convene on January 17th in Denver, Colorado to continue to review and finalize the key term sheet and discuss next steps. Mr. Harris stated that at some point the workgroup will need to complete the Basin States agreement (also known as the "Companion Agreement"), which will outline how the DCP could be executed. Mr. Harris reported that it is still anticipated that the Lower Basin DCP will be implemented by August 2018.

Mr. Harris reported that Arizona's 2018 legislative session is kicking off to address the ongoing Colorado River water issues between the Central Arizona Water Conservation District (CAWCD) and the Arizona Department of Water Resources (ADWR). Mr. Harris noted that the current basin wide hydrologic conditions may create more urgency for the Lower Basin to complete the Lower Basin DCP. Chairman Fisher elaborated that CAWCD insisted that they have certain authority over Arizona's water management, while the Governor states that it falls under the State's purview. Mr. Fisher added that Arizona's legislature is considering legislation that supports the Governor's views on this issue. Chairman Fisher added that he is unsure whether

the legislative session will resolve the issue or defer action on it but thought that the specific legislation could benefit the Lower Basin DCP process.

Minute No. 323

Mr. Harris reported that a Desalination Work Group meeting is scheduled for January 25th in Tijuana, Baja California. Regarding Minute No. 319, the U.S, Section of the International Boundary and Water Commission (IBWC) notified Reclamation on December 14th that Mexico had transferred about 124,000 AF of water from its deferred delivery account into Lake Mead. Mr. Harris stated that the water will be divided among IID, MWD, CAWCD and Southern Nevada Water Authority (SNWA), and the balance will be system conservation in Lake Mead. Reclamation informed the agencies that 23,000 AF of binational ICS will be credited to their respective ICS accounts. Mr. Harris noted that the water conservation projects in Mexico have yet to be completed, and Mexico and the IBWC will continue to work on this effort.

Colorado River Basin Salinity Control Program

Mr. Harris reported that the Salinity Work Group is planning to meet in Boulder City, Nevada February 12th and 14th including a tour of Hoover Dam. The Forum and the Advisory Council are scheduled to meet in St. George, Utah on May 14th and 17th. The Forum plans to take a trip to Pah Tempe Springs on the Virgin River during that meeting. The Pah Tempe Springs is another potential point source salinity control project similar to the Paradox Valley Unit. Extensive studies have been conducted over the past few years by the U.S. Geological Survey. A project at Pah Tempe Springs can reduce salt loading into the Virgin River at almost 90,000 tons of salt per year and can act as a "backstop" to the Paradox Valley Unit in the event of its failure. This area also has a significant cost-sharing potential with the Washington County Water Conservancy District. The Work Group and Technical Advisory Committee are working to develop a feasibility assessment for a project at Pah Tempe Springs, which could benefit the local area as well as the basin-wide salinity control program.

Agreement Establishing Programmatic Funding for Colorado River Basin Weather Modification

Mr. Harris reported that agencies from the seven Basin States have put together a programmatic agreement to more effectively manage the ongoing weather modification programs in the states of Colorado, Utah, and Wyoming. Weather modification is considered one of the primary components of the Upper Basin's drought contingency planning process.

Mr. Nguyen elaborated on the long-term programmatic weather modification funding agreement. The parties to the agreement in the Upper Basin States include the Colorado Water

Conservation Board, the Utah Division of Water Resources, and the Wyoming Water Development Office. The funders are the Lower Basin States as well as the New Mexico Interstate Stream Commission, who provides funding to Colorado in lieu of implementing a weather modification program in its state. The term of the agreement extends from 2018 to 2026 in parallel with the 2007 Interim Guidelines. Some of the guiding principles developed in this agreement include creating a 50%/50% cost share between Upper Basin and Lower Basin states. The funding contributions would be subject to annual approvals, and there is no minimum annual contributions or commitments required in the agreement. Mr. Nguyen added that the funding process is expected to remain the same with review of proposed activities and approval by the Six Agency Committee each year. Each of the Lower Basin funders could contribute up to \$500,000 annually with the expectation that the Upper Basin States will provide an equal amount of cost-share funds, with the program gradually expanding under the terms of the agreement. Mr. Nguyen added that the Six Agency Committee has funded between \$250,000 to \$280,000 annually for Upper Basin weather modification programs over the past few years.

Mr. Nguyen reported that this programmatic agreement establishes a Basin States Technical Committee that would be comprised of one representative from each state to direct the implementation of the agreement. The agreement also provides timelines for activities and deliverables and requires consistent annual reporting and accounting. Mr. Nguyen summarized that the agreement combines the various Upper Basin weather modification programs into one programmatic administrative and funding agreement that will extend through Water Year 2026 and focuses the contributed funds on cloud seeding activities.

With respect to the 50%/50% cost share, Mr. Harris added that Wyoming is still adhering to its statutory 75%/25% cost share ratio. Mr. Harris recommended that the Board continue to work with Wyoming in addressing the cost-share imbalance related to weather modification activities.

Mr. Harris described that the next steps in the approval of this funding agreement would be for the basin states to get approval by their respective entities, and then staff would bring this back to the Board for formal action in one to two months.

Mr. Nelson asked if there had been any discussions with Mexico regarding participation in the weather modification program. Mr. Harris stated that he was not aware of any discussions and acknowledged water supply augmentation efforts in the basin may ultimately benefit Mexico too.

ANNOUNCEMENTS

Mr. Harris reported that President signed the continuing resolution to fund the federal

government until mid-February. The Senate confirmed Mr. Timothy Petty as the new Assistant Secretary for Water and Science.

Finally, Mr. Peterson suggested adding a new item on the agenda called "Future agenda items".

ADJOURNMENT

With no further items to be brought before the Board, Chairman Fisher adjourned the meeting at 11:36 a.m.